

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019696**Date Inspected:** 03-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Yu Dong Ping
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A

Bridge No: 34-0006**Component:** TOWER & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 08034

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component designations reviewed are as follows:

TOWER GRILLAGE TOP PLATE

GTSA5-C/G-BFP-1-46~90

GTSA5-C/G-BFP-1-1~45

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

TOWER GRILLAGE TOP PLATE

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GTSA5 – C/G – BFP – 1 – 65; 67; 75; 78; 87

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 08035

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

WEST TOWER LIFT-4, REPAIR AREAS AFTER BLASTING AND PAINTING (EXTERNAL)

Pinhole- Skin D at 143m Façade Plate weld

Gouge Mark- Skin E at 123m Doubler Plate 450mm from Skin A edge

WEST TOWER LIFT-4, REPAIR AREAS AFTER BLASTING AND PAINTING (INTERNAL)

Base metal gouge- Skin A near AB corner at 129m

Misdrilled- Skin A grate support bolt hole at 116m

Porosity- btw Skin D and upper diaphragm at 123m

Base material arc gouge- Skin D at 143m top near D/E corner

Base material arc gouge- Skin C at 143m 1st stiffener from Skin B

Base material arc gouge- Skin A at 139m bottom Diaphragm close to Skin E 1st stiffener

Underfill- Diaphragm to Skin weld at 131m

Base material arc gouge- Skin A 1st stiffener from Skin D at 131m top Diaphragm

BAY#11

This QA Inspector observed the following work in progress

Flux Cored Arc Welding (FCAW):

Weld joint # 09 located on Bike Path BK011A1 – 001. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – ESAB. (See attached photo)

Weld joint # 09 located on Bike Path BK012A1 – 001. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – ESAB.

Weld joint # 21 located on Bike Path BK004C2 – 024. Welder is identified as 053316. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – ESAB.

Shielded Metal Arc Welding (SMAW):

Weld joint # 15 located on Bike Path BK004C2 – 024. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112 – Plug.

Weld joint # 17 located on Bike Path BK004C2 – 024. Welder is identified as 066155. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with

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the WPS – B – P – 2112 – Plug. (See attached photo)

Heat Straightening:

Heat Straightening being performed on tower head component identified as WSD1-FFSA6-4 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (T) – 11661.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer